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EXAMINER	
LAROSE, COLIN M	

ART UNIT	PAPER NUMBER
2624	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,033	MATHEW ET AL.	
	Examiner	Art Unit	
	Colin M. LaRose	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11,13-15 and 18-27 is/are rejected.

7)☒ Claim(s) 12,16 and 17 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

2. Claims 25-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 25-27 recite an "image," which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 13 recites the limitation "the textual indicia to remain decipherable." There is insufficient antecedent basis for this limitation in the claim. [For examination purposes, claim 13 is presumed to depend from claim 12, which provides the requisite antecedent basis.]

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4, 6, 7, 10, 14, 19, 20, 22, 23, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,735,347 by Bates et al. ("Bates").

Regarding claims 1, 19, and 22, Bates discloses a computer-implemented method/system/program for processing digital images comprising:

analyzing image data to identify undesired indicia to be obfuscated in an image reconstructed from the image data (column 6/31-32: image is analyzed via optical character recognition in order to identify text to be removed);

identifying one or more region in which the undesired indicia appear in the image (column 6/32-34: the region containing the undesired text is identified); and

replacing image data for the one or more regions with replacement data to render the undesired indicia undecipherable in an image reconstructed from the image data (column 6/34-40: the identified text is removed and replaced by replacement data—see, e.g., figures 5 and 7).

Regarding claim 2, Bates discloses the identifying indicia include text defined by pixels of the image reconstructed from the image data (see figure 5).

Regarding claim 3, Bates discloses the indicia are identified by optical character recognition (column 6/31-32).

Regarding claim 4, Bates discloses the replacement data masks the one or more region with a substantially uniform pixel intensity (see figure 7).

Regarding claim 6, Bates discloses allowing desired indicia to remain decipherable in the image reconstructed from the image data (see figure 6: user can "paste" the image, thereby retaining the text in the reconstructed image, as opposed to the "paste w/out text" operation, which removes the text).

Regarding claims 7, Bates discloses the desired indicia include indicia providing a general description of the image subject matter or a date (see figure 5: the text, "star," provides a general description of the subject matter of the image).

Regarding claim 25, Bates discloses an image generated by the method of claim 1 (see figure 7).

Regarding claim 10, 20, and 23, Bates discloses a computer-implemented method/system/program for processing digital images comprising:

analyzing image data via optical character recognition to identify textual indicia apparent in an image reconstructed from the image data (column 6/31-32: image is analyzed via optical character recognition in order to identify text to be removed);

identifying one or more region in which the indicia appear in the image (column 6/32-34: the region containing the undesired text is identified); and

replacing image data for the one or more regions with replacement data to render the indicia undecipherable in an image reconstructed from the image data (column 6/34-40: the identified text is removed and replaced by replacement data—see, e.g., figures 5 and 7).

Regarding claim 14, Bates discloses the replacement data masks the one or more region with a substantially uniform pixel intensity (see figure 7).

Regarding claim 26, Bates discloses an image generated by the method of claim 10 (see figure 7).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,735,347 by Bates et al. ("Bates").

Regarding claim 9, Bates does not appear to expressly disclose that the image data encodes a grey scale image, i.e., that Bates' images are encoded in a grey scale format. However, at the time the invention was made, it was notoriously well-known for images to be encoded, or represented, in a grey scale format, and such a limitation would have been obvious to those skilled in the art of image processing. *Official notice taken.*

10. Claims 5, 8, 11, 15, 18, 21, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,735,347 by Bates et al. ("Bates") in view of U.S. Patent 6,823,203 by Jordan.

Regarding claim 5, Bates does not appear to disclose identifying indicia to remain decipherable in the image reconstructed from the image data, and wherein the step of replacing the image data only replaces data for the one or more regions and not for regions in which the indicia to remain decipherable appear.

Jordan discloses a system for removing sensitive data from diagnostic images. In particular, Jordan teaches that in certain circumstances, it is desirable to remove private data, such as a patient's identity, from medical images to be used for training or public presentation (column 8/43-49). Jordan provides means for identifying the patient's data, in the form of text,

within a medical image and removing such text from the image (see column 8/50-54 and figures 6A-6D).

Figure 6B shows a medical image with a patient's data 522 present. Figure 6C shows a modification of the medical image where the patient's data has been completely removed. However, figure 6D shows an alternative image that removes only a portion of the patient's information, such as the patient's name and insurance number. The user is allowed to identify patient indicia to remain in the image and replace data only for the other regions in which the indicia to be removed appear. See column 8, line 61 *et seq.*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bates by Jordan so that Bates' method selectively removes some portions of patient identification data from medical diagnostic images while retaining other portions, as claimed, since Bates teaches removing textual data from images, in general, and Jordan teaches the desirability of selectively identifying and removing portions of text specifically from medical images in order to protect the privacy of the corresponding patients.

Regarding claims 8 and 11, Bates does not expressly disclose that the image data represents a medical diagnostic image, and wherein the undesired indicia include patient identifying indicia.

Bates' method appears to be applicable to any image containing text, however, Bates does not expressly disclose that the image is a "medical diagnostic image" and that the text to be removes constitutes "indicia of a patient's identity," as claimed.

Jordan discloses a system for removing sensitive data from diagnostic images. In particular, Jordan teaches that in certain circumstances, it is desirable to remove private data, such as a patient's identity, from medical images to be used for training or public presentation (column 8/43-49). Jordan provides means for identifying the patient's data, in the form of text, within a medical image and removing such text from the image (see column 8/50-54 and figures 6A-6D).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bates by Jordan so that Bates' method removes patient identification data from medical diagnostic images, as claimed, since Bates teaches removing textual data from images, in general, and Jordan teaches the desirability of removing text specifically from medical images in order to protect the privacy of the corresponding patients.

Regarding claims 15, 21, and 24, Bates discloses a computer-implemented method/system/program for processing digital images comprising:

analyzing image data via optical character recognition to identify textual indicia apparent in an image reconstructed from the image data (column 6/31-32: image is analyzed via optical character recognition in order to identify text to be removed);

identifying one or more region in which the indicia appear in the image (column 6/32-34: the region containing the undesired text is identified); and

replacing image data for the one or more regions with replacement data to render the indicia undecipherable in an image reconstructed from the image data (column 6/34-40: the identified text is removed and replaced by replacement data—see, e.g., figures 5 and 7).

Bates' method appears to be applicable to any image containing text, however, Bates does not expressly disclose that the image is a "medical diagnostic image" and that the text to be removes constitutes "indicia of a patient's identity," as claimed.

Jordan discloses a system for removing sensitive data from diagnostic images. In particular, Jordan teaches that in certain circumstances, it is desirable to remove private data, such as a patient's identity, from medical images to be used for training or public presentation (column 8/43-49). Jordan provides means for identifying the patient's data, in the form of text, within a medical image and removing such text from the image (see column 8/50-54 and figures 6A-6D).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bates by Jordan so that Bates' method removes patient identification data from medical diagnostic images, as claimed, since Bates teaches removing textual data from images, in general, and Jordan teaches the desirability of removing text specifically from medical images in order to protect the privacy of the corresponding patients.

Regarding claim 18, Bates discloses the replacement data masks the one or more region with a substantially uniform pixel intensity (see figure 7).

Regarding claim 27, the combination of Bates and Jordan teaches producing an image generated by the method of claim 15 (see, e.g., figure 6C of Jordan).

Allowable Subject Matter

11. Claims 12, 13, 16, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 12 and 16, neither Bates nor Jordan, alone or in combination, teach or suggest comparing the text identified via OCR to a list of textual indicia to remain in the image, as claimed. Jordan allows a user to select which textual indicia is to remain in the image via menus, check buttons, and the like (column 8/61+), however there is no comparison of text identified via OCR to a list of text to remain, as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000. Any inquiry of a general nature or relating to the status of this application or proceeding can also be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

Colin M. LaRose
Group Art Unit 2624
19 June 2007